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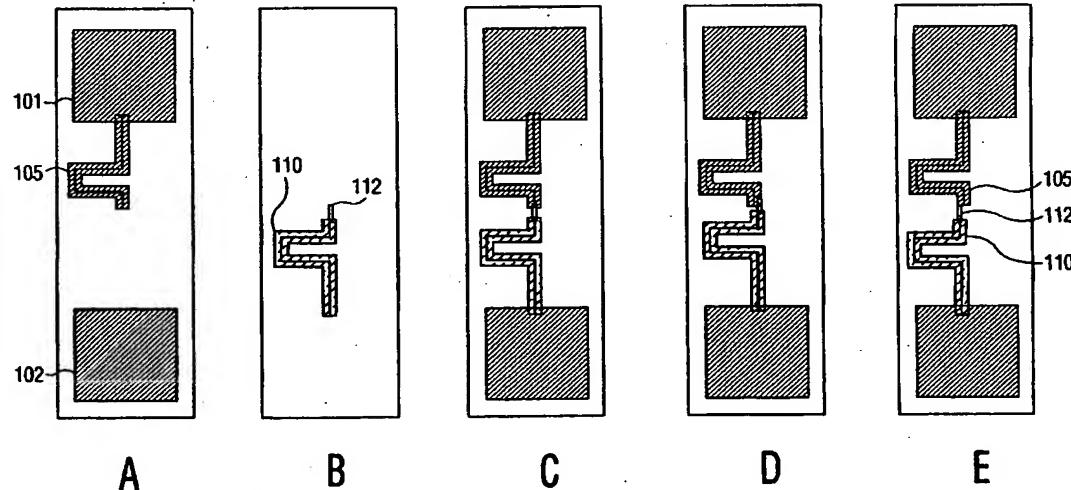
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[Continued on next page]

(54) Title: RESISTOR STRUCTURES TO ELECTRICALLY MEASURE UNIDIRECTIONAL MISALIGNMENT OF STITCHED MASKS



(57) **Abstract:** An apparatus and method for matched variable resistor structures to electrically measure unidirectional misalignment of stitched masks for etched interconnect layers includes a first test pad (101) and a second test pad (102) for measuring resistance therebetween; a first resistive element (105) electrically connected at a first end to the first test pad (101); and, a second resistive element (110) electrically connected at a first end to the second test pad (102). The first resistive element and the second resistive element are electrically connected by a vertical offset (112). The resistance measured between the first test pad and the second test pad is variable in accordance with an alignment of the first resistive element and the second resistive element relative to the vertical offset, see Fig. 1C-E. An indicator may optionally provide an indication that the resistive elements are in alignment.

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